TITLE

ABSTRACT OF THE DISCLOSURE

There is provided a purified, isolated and cloned DNA sequence partially encoding a functional portion of a polypeptide component required for the synthesis of antibiotic TA. Also provided are purified, isolated and cloned DNA sequences encoding a polypeptide component required for postmodification of antibiotic TA and encoding a gene product involved in the regulation of the biosynthesis of antibiotic TA. A purified, isolated and cloned DNA sequence having a DNA sequence (Seq. ID No:1 and 2) encoding a polypeptide component required for encoding the TA gene cluster and any mutations thereof is provided. Also provided are methods of using the TA genes for combinatorial genetics and of using the TA genes encoding for synthesis and modification or regulation of antibiotic TA.